

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

-----X  
TWENTIETH CENTURY FOX FILM CORPORATION, :  
UNIVERSAL CITY STUDIOS PRODUCTIONS LLLP, :  
PARAMOUNT PICTURES CORPORATION, :  
DISNEY ENTERPRISES, INC., :  
CBS BROADCASTING INC., :  
AMERICAN BROADCASTING COMPANIES, INC. :  
and NBC STUDIOS, INC., :  
:

Plaintiffs/Counterclaim-Defendants, :

06 Civ. 3990 (DC)

v. :

CABLEVISION SYSTEMS CORPORATION :  
and CSC HOLDINGS, INC., :  
:

Defendants/Counterclaim-Plaintiffs. :  
-----X

**DECLARATION OF ELEANOR M. LACKMAN**

ELEANOR M. LACKMAN declares as follows:

1. I am an attorney admitted to practice before this Court. I am associated with Arnold & Porter LLP, counsel for attorneys for plaintiffs/counterclaim-defendants Twentieth Century Fox Film Corporation, Universal City Studios LLLP, Paramount Pictures Corporation, Disney Enterprises, Inc., CBS Broadcasting Inc., American Broadcasting Companies, Inc. and NBC Studios, Inc. in the above-captioned matter. I submit this declaration in support of plaintiffs' Motion for Summary Judgment.

2. A true and correct copy of selected portions of the Federal Communications Commission's *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming: Twelfth Annual Report*, released March 3, 2006, available at [http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\\_or\\_pdf=pdf&id\\_document=651833355](http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=651833355), is attached hereto as Exhibit A.

3. A true and correct copy of relevant portions of the deposition transcript of Edward McRae Budill, dated July 25, 2006, is attached hereto as Exhibit B.

4. A true and correct copy of relevant portions of the deposition transcript of Michael Larry DeHart, dated August 2, 2006, is attached hereto as Exhibit C.

5. A true and correct copy of relevant portions of the deposition transcript of Stephanie Mitchko, dated July 11-12, 2006, is attached hereto as Exhibit D.

6. A true and correct copy of relevant portions of the deposition transcript of Patricia Gottesman, dated August 1, 2006, is attached hereto as Exhibit E.

7. A true and correct copy of the document bates labeled CSC000001 and identified as Exhibit 4 to the deposition of Stephanie Mitchko, dated July 11-12, 2006, is attached hereto as Exhibit F.

8. A true and correct copy of relevant portions of the deposition transcript of Kirk Blattman, dated August 11, 2006, is attached hereto as Exhibit G.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: New York, New York  
August 25, 2006



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ELEANOR M. LACKMAN

Exhibit A

## Federal Communications Commission

FCC 06-11

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
**WASHINGTON, D.C. 20554**

In the Matter of	)	
	)	
Annual Assessment of the Status of Competition	)	MB Docket No. 05-255
in the Market for the Delivery of Video	)	
Programming	)	

**TWELFTH ANNUAL REPORT**

**Adopted: February 10, 2006**

**Released: March 3, 2006**

**Comment Date: April 3, 2006**

**Reply Comment Date: April 18, 2006**

By the Commission: Chairman Martin, Commissioners Copps, Adelstein, and Tate issuing separate statements.

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**I. INTRODUCTION**

1. As required by Section 628(g) of the Communications Act of 1934, as amended, this is the Commission's twelfth annual report (*2005 Report*) to Congress on the status of competition in the market for the delivery of video programming.<sup>1</sup> Congress imposed this annual reporting requirement in the Cable Television Consumer Protection and Competition Act of 1992 (1992 Cable Act)<sup>2</sup> as a means of obtaining information on the competitive status of the market for the delivery of video programming.

**A. Scope of this Report**

2. Consistent with the statutory purpose, we report on developments in the market for the delivery of video programming and on the factors that have facilitated or impeded changes in the competitive environment over the past year. We present information and analysis regarding changes in the market since the *2004 Report*, and we describe how those changes affect the current state of the market. The information and analysis provided in this *Report* are based on information submitted by

<sup>1</sup> The Commission's previous reports appear at: *Implementation of Section 19 of the 1992 Cable Act (Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming)*, 1994 *Report*, 9 FCC Rcd 7442 (1994); 1995 *Report*, 11 FCC Rcd 2060 (1996); 1996 *Report*, 12 FCC Rcd 4358 (1997); 1997 *Report*, 13 FCC Rcd 1034 (1998); 1998 *Report*, 13 FCC Rcd 24284 (1998); 1999 *Report*, 15 FCC Rcd 978 (2000); 2000 *Report*, 16 FCC Rcd 6005 (2001); 2001 *Report*, 17 FCC Rcd 1244 (2002); 2002 *Report*, 17 FCC Rcd 26901 (2002); 2003 *Report*, 19 FCC Rcd 1606 (2004); and 2004 *Report*, 20 FCC Rcd 2755 (2005). See Communications Act of 1934 § 628(g), 47 U.S.C. § 548(g).

<sup>2</sup> Pub. L. No. 102-385, 106 Stat. 1460 (1992).

Hundreds of local stations are using their digital channels to provide multicast programming, including news, weather, sports, religious material, music videos and coverage of local musicians and concerts, as well as foreign language programming. As of May 2005, cable operators were carrying commercial broadcasters' multicast programming in more than 50 markets (including at least seven of the top 10 markets).<sup>14</sup>

18. **Internet Video.** The amount of web-based video provided over the Internet continues to increase significantly each year. The overall number of homes with access to the Internet continues to grow, as does the number of Americans who access the Internet via a high-speed broadband connection. As of June 2005, there were approximately 33.7 million high-speed residential Internet access subscribers, representing approximately 48 percent of the 70.3 million residential Internet subscription households. As of January 2005, an average of 14 percent of all Americans had watched some form of streaming video in the preceding month, and approximately eight percent of Americans had accessed streaming video content in the preceding week.

19. **Home Video Sales and Rentals.** The sale and rental of home videos, including videocassettes and DVDs, offer consumers an alternative to the premium and pay-per-view offerings of MVPDs. Video-on-demand services provided by cable, DBS, and Internet providers have emerged, in turn, as competitive alternatives to home video. Nine out of 10 TV households have at least one VCR, and an estimated 80 million households have DVD capability, representing nearly three-quarters of all U.S. households.

20. **Cable System Ownership.** Between July 2004 and June 2005, a total of 22 MVPD transactions were announced.<sup>15</sup> Together these transactions were valued at approximately \$48.7 billion and affected approximately 12.7 million subscribers. At the end of 2004, there were 118 clusters with approximately 51.5 million subscribers compared to 108 clusters and approximately 53.6 million subscribers at the end of 2003 (although due to a change in methodology, these figures are not directly comparable). In the largest cluster size category (over 500,000 subscribers), the number of clusters remained constant at 29 between 2003 and 2004.

21. **Video Programming Services.** In 2005, using additional data resources, we identified 531 satellite-delivered national programming networks, an increase of 143 networks over the 2004 total of 388 networks. Of the 531 networks, 116 networks (21.8 percent) were vertically integrated with at least one cable operator. Five of the top seven cable operators (*i.e.*, Comcast, Time Warner, Cox, Charter, and Cablevision) hold ownership interests in satellite-delivered national programming networks. All of the vertically integrated networks are owned in whole or in part by one or more of these companies. Of the 531 national nonbroadcast networks we have identified, 274, or 51.6 percent, that are not affiliated with any cable operator or other media entity. There are 107 national, satellite-delivered nonbroadcast networks that are owned by a DBS operator or one or more national broadcast networks (*i.e.*, Fox, ABC, CBS, NBC Universal, and Univision) and that are not also owned by a cable operator. These networks represent 20.2 percent of the 531 national nonbroadcast networks we have identified, and 25.8 percent of the 415 networks that are unaffiliated with a cable operator. Twenty-two national nonbroadcast networks, not owned by a cable MSO, are vertically integrated with a DBS provider. During the 2004-2005 television season, more than half of all prime time viewers watched ad-supported nonbroadcast networks, the second consecutive year that these networks, combined, have topped all national broadcast networks, combined, for an entire TV season. Of the 15 top-rated prime time nonbroadcast networks, three are

<sup>14</sup> This does not necessarily include all multicast programming available from broadcasters in all markets and may include only carriage of special events in certain markets. For example, several cable operators agreed to carry CBS stations' extra coverage of the 2005 NCAA men's college basketball tournament on multicast channels.

<sup>15</sup> These figures are for announced transactions, including the sale of Adelphia's assets to Comcast and Time Warner currently under review by the Commission.

vertically integrated with a cable operator. The remaining 12 networks are owned by other media entities. In addition, six of the top 20 nonbroadcast networks (ranked by subscribership) are vertically integrated with a cable operator. Of the other 14 networks, one is C-SPAN, which is funded, but not directly owned or controlled, by MVPDs; 12 are affiliated with noncable media entities; and one is unaffiliated.

22. In 2005, we identified 96 regional networks, the same number that we identified in 2004. Many, but not all, regional networks are delivered by satellite. These networks provide programming of local or regional interest and are distributed to subscribers of one or more MVPDs in an area. A number of regional networks offer local news or sports programming, but some provide more general programming, such as religious or ethnic programming. Of the 96 regional networks we identified, 44 networks, or 45.8 percent, were vertically integrated with at least one cable multiple system operator (MSO). We continue to monitor the availability of sports programming. There are 37 regional sports networks, representing 38.5 percent of all regional networks, devoted to sports programming, as compared to the 38 we reported last year. Of the 37 regional sports networks, 17, or 45.9 percent, are vertically integrated with a cable MSO. In addition, News Corp., which holds an interest in DBS operator DIRECTV, is affiliated with 16 regional sports networks.

23. **Consumer Equipment and Technical Developments.** The sale of DTV consumer electronics continues to accelerate. For 2005, industry estimates indicate that 8.2 million HD-ready monitors will be shipped to retailers. CEA reports that during the first six months of 2005, DTV products sold at a faster rate than during any previous comparable period of time, with 3.8 million DTV products sold, a 40 percent increase in unit sales from the same time period in 2004. In 2005, the average retail price of a DTV set was expected to drop to \$1,189 from \$1,489 in 2004, down from the average price of \$3,147 in 1998. CEA states that currently several DTV models are available for under \$700, and it expects that soon there will be DTV sets that sell for as low as \$400.

24. The development and deployment of CableCARDS continued in 2005. CableCARDS permit the reception of one-way secured digital cable services without the addition of a set-top box. As of November 30, 2005, there were 375 certified or verified models of CableCARD products collectively offered by 22 manufacturers, up from 60 models offered by 11 manufacturers the previous year. One-way CableCARDS have been deployed to more than 90,000 subscribers by the ten largest MSOs.

25. The video industry is evaluating the use of advanced compression technologies, such as MPEG-4/H.264 and Microsoft's VC-1, to replace the MPEG-2 standard in order to decrease the amount of bandwidth required to transmit digital video. For example, DIRECTV is using MPEG-4 to provide HD local-into-local in a number of markets. These advances are expected to allow existing video delivery services to provide more programming and to decrease barriers to entry for new entrants to the MVPD market.

26. **Foreign Markets.** In foreign markets, a number of incumbent operators and new entrants are providing Internet protocol television (IPTV) over DSL. Services are offered generally through a "triple play" service package of video, telephone and broadband Internet access. Operators also offer a wide selection of a la carte and themed video programming packages.



## II. COMPETITORS IN THE MARKET FOR THE DELIVERY OF VIDEO PROGRAMMING

### A. Cable Television Service

27. This section addresses the performance of cable television system operators during the past year.<sup>16</sup> First, we report on the general performance of the industry, including subscriber levels, availability of basic services, viewership, and cable rates. Second, we discuss the cable industry's financial performance, including its revenue, cash flow status, stock valuations, and system transactions. Third, we examine the cable industry's acquisition and disposition of capital. Lastly, we address the growth of advanced video services, including digital and high-definition television, video-on-demand, and digital video recorders; and nonvideo advanced services, including high-speed Internet access and voice over Internet protocol telephony.

#### 1. General Performance

28. The number of subscribers to basic cable service<sup>17</sup> and premium cable service<sup>18</sup> declined in 2004. Basic cable penetration, the ratio of the number of basic cable subscribers to the number of homes passed,<sup>19</sup> declined in 2004 and is estimated to have declined further in the first half of 2005. By many other measures, however, general cable industry performance increased across the board. For example, premium service subscriptions<sup>20</sup> and subscriptions to digital video service increased.<sup>21</sup> Although basic cable penetration decreased in 2004, homes passed increased during the same period. Channel capacity<sup>22</sup> and deployment of video-on-demand,<sup>23</sup> digital video recorders,<sup>24</sup> and high-definition service all

<sup>16</sup> A cable system operator is "any person or group of persons (A) who provides cable service over a cable system, and directly or through one or more affiliates owns a significant interest in such cable system; or (B) who otherwise controls or is responsible for, through any arrangement, the management and operation of such a cable system." 47 U.S.C. § 522(5).

<sup>17</sup> Basic cable service, also referred to as the basic service tier (BST), is the level of cable television service that must be taken by all cable television subscribers. The content of basic cable service varies among cable systems but, pursuant to the Communications Act, must include all local television signals and public, educational, and governmental access channels and, at the discretion of the cable operator, may include other video services. Expanded basic cable service, also referred to as the cable programming service tier (CPST) for purposes of rate regulation, offers additional video channels on one or more service tiers. 47 U.S.C. § 543(b)(7); 47 U.S.C. § 543(k)(2).

<sup>18</sup> Premium services are nonbroadcast networks provided by a cable operator on a per-channel basis for an extra monthly fee. Pay-per-view (PPV) services are nonbroadcast networks provided on a per program basis. PPV service is a separate category from premium service.

<sup>19</sup> Homes passed is the total number of households capable of receiving cable television service.

<sup>20</sup> Premium service subscriptions are the number of premium services to which homes are subscribing (also known as pay units).

<sup>21</sup> Digital cable service refers to digitally compressed video channels offered on digital service tiers. Every subscriber of a cable system must subscribe to the basic tier in order to subscribe to any other tier of video service or to purchase any other video service. 47 C.F.R. § 76.920.

<sup>22</sup> Channel capacity is bandwidth dedicated to video use. Video channel capacity can be increased or decreased on any given system simply by using more or less bandwidth for other services, such as high-speed Internet access services or cable telephony.

<sup>23</sup> Video-on-demand (VOD) allows subscribers to select at any time movies and other programs they wish to view from a selection of titles stored on a remote server.

<sup>24</sup> Digital video recorders (DVRs) use a hard disk drive to record video programs.



penetration rate is an estimate, subject to some variation from the actual penetration rate. The limitations of the data sources do not appear to affect the determination with respect to the first prong of the 70/70 test, which is higher than the threshold regardless of the data source used for the calculation. The question of whether the second prong has been met is less clear since at least one party finds that the benchmark has been exceeded and some other estimates, while under 70 percent, are very close to that threshold. Given these circumstances and the fact that all available data sources are imprecise to some extent, it is possible that the second prong of the 70/70 benchmark has been met.

36. In light of the significance of this issue and commenters' disagreements as to whether the statutory standard has been satisfied, the Commission is seeking further public comment on the best methodologies and data for measuring the 70-percent thresholds. For example, controversy has arisen in other proceedings regarding how the Commission should define whether a cable system is available to a household.<sup>51</sup> The question of how to define a household for purposes of the 70/70 test has also arisen.<sup>52</sup> Should we include only households that are occupied? Should we include only households that contain a television set? How should we determine whether a household subscribes to a cable system? Should we include only households that subscribe to the basic tier of video services, thereby excluding those households that subscribe only to non-video services?<sup>53</sup> We also seek comment on SBC's suggestion that the Commission should require the cable industry to provide "the relevant data on a consistent and transparent basis."<sup>54</sup> We also invite comment on what, if any, additional action should be undertaken to achieve the statutory goals, should we find that the thresholds have been met.<sup>55</sup> As a preliminary matter, we ask commenters who advocate that the Commission promulgate additional rules to address the scope of our statutory authority under Section 612(g) to do so. We also ask commenters who advocate the promulgation of additional regulations to provide a detailed description of the suggested regulations and of their potential costs and benefits. Deadlines for public comment on these questions are provided in the final section of this Report.

37. **Subscribership.** The number of basic cable subscribers declined slightly from 66 million in 2003 to 65.4 million in 2004, as shown in Table 1 below. Kagan estimated that the number of basic cable subscribers would remain unchanged at 65.4 million basic subscribers at year-end 2005.<sup>56</sup>

(Continued from previous page) \_\_\_\_\_

than 20,000 subscribers and a 5 percent sample of systems with fewer than 20,000 subscribers. SBC's estimate combines data from several publicly available data sources.

<sup>51</sup> See *EchoStar-Hughes HDO*, 17 FCC Rcd at 20611-12 ¶¶ 122-25. See also *2004 Video Competition Report*, 20 FCC Rcd at 2766-68 ¶¶ 18-20; and *2003 Report*, 19 FCC Rcd at 1620-21 ¶¶ 21-22.

<sup>52</sup> *2004 Video Competition Report*, 20 FCC Rcd at 2766-68 ¶¶ 18-20; and *2003 Video Competition Report*, 19 FCC Rcd at 1620-21 ¶¶ 21-22.

<sup>53</sup> We recognize that at the time that Congress drafted Section 612, very few cable operators were providing services beyond multichannel video offerings.

<sup>54</sup> SBC Reply Comments at 16.

<sup>55</sup> Should our analysis of the further public input here indicate that Commission action under Section 612(g) may be warranted, we will issue a Notice of Proposed Rulemaking to seek comment prior to adoption of any potential new regulations.

<sup>56</sup> Cable Databook at 11.

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**TABLE 1: Cable Television Industry Growth: 1999 - June 2005 (in millions)<sup>57</sup>**

Year	TV Households (TH) <sup>58</sup>		Homes Passed (HP) <sup>59</sup>		Basic Subscribers (Subs) <sup>60</sup>		HH Passed by Cable (HP/TH)	HHs Subscribing (Subs/TH)	U.S. Penetration (Subs/HP)
	Total	% Change Over Prior Yr	Total	% Change Over Prior Yr	Total	% Change Over Prior Yr			
1999	100.8	1.4%	97.6	2.1%	65.9	1.2%	96.8%	65.4%	67.5%
2000	102.2	1.4%	98.9	1.3%	66.6	1.1%	96.8%	65.2%	67.3%
2001	104.4	2.2%	100.6	1.7%	66.9	0.5%	96.4%	64.1%	66.5%
2002	106.7	2.2%	103.4	2.8%	66.1	-1.2%	96.9%	61.9%	63.9%
2003	108.4	1.6%	106.0	2.5%	66.0	-0.2%	97.8%	60.9%	62.3%
2004	109.6	1.1%	108.6	2.5%	65.4	-0.9%	99.1%	59.7%	60.2%
June 2005	109.6	0.0% <sup>61</sup>	109.7	1.0%	65.4	0.0%	100.1%	59.7%	59.6%

38. Although the number of basic subscribers was unchanged for the second quarter of 2005, as shown in Table 2, cable companies continue to experience variations in the number of basic subscribers they serve.

<sup>57</sup> Historical data in this table may differ from that previously reported because some data have been updated by Kagan. See Cable Databook at 9, 11.

<sup>58</sup> The 2004 and estimated June 2005 TV Household numbers are reported by Kagan Research, LLC as total U.S. TV households. The numbers are derived from Nielsen Media Research and Kagan estimates. *Id.* at 11.

<sup>59</sup> Kagan reports the 1999 through 2004 homes passed numbers as occupied cable homes passed. The June 2005 homes passed estimate is an average calculated from the actual 2004 and the projected 2005 numbers for occupied cable homes passed. *Id.* at 9, 11.

<sup>60</sup> Kagan reports the 1999 through 2004 basic subscriber numbers as basic subscribers. The June 2005 basic subscriber estimate is an average calculated from the actual 2004 and the projected 2005 numbers for total basic cable subscribers. *Id.*

<sup>61</sup> Percentage change columns in this row are from December 2004 to June 2005.

directly into their digital television set without the need for a set-top box. Consumers, however, must obtain a security card (often called a CableCARD), from their local cable operator, to be inserted into the television set. Approximately 90,000 one-way CableCARDS have been deployed.<sup>136</sup>

55. Consumers still need a set-top box to receive two-way services (e.g., video-on-demand), and the cable and consumer electronics industries continue to work on an agreement for two-way “plug-and-play” functionality.<sup>137</sup> Samsung Electronics recently achieved CableLabs Certified status for an OpenCable Application Platform (OCAP) enabled interactive digital television set that can connect directly to the cable system, and receive current advanced and premium cable services.<sup>138</sup> The television set is currently in trials with Time Warner in North Carolina.<sup>139</sup> Consumer electronics manufacturers are selling digital cable-ready television sets with over-the-air integrated DTV tuners as well as cable tuners.<sup>140</sup> Industry sources indicate that two-way digital devices will soon be available in retail stores.<sup>141</sup>

56. **Video-on-Demand (VOD).** VOD allows subscribers to order video programs from a central server at any time of day, and to fast-forward, rewind, and pause the programs.<sup>142</sup> In most cases, subscribers receive unlimited viewing of a VOD program for 24 hours. Some cable operators also offer subscription video-on-demand (SVOD) where subscribers pay a monthly fee for unlimited access to a library of pre-selected programs. Other cable operators offer near video-on-demand (NVOD) which typically features a schedule of popular movies and events offered on a staggered-start basis (e.g., every 15 to 30 minutes). Cable companies view VOD as a competitive service to DVD/VHS rentals and a means to help reduce subscriber churn. At year-end 2004, VOD service was available to 73 percent of

<sup>136</sup> NCTA reports that 90,000 CableCARDS have been deployed by the 10 largest cable operators. See Letter from Neal M. Goldberg, General Counsel, NCTA, to Marlene H. Dortch, Secretary, FCC, CS Docket No. 97-80 (Dec. 29, 2005), at 1.

<sup>137</sup> See para. 211 *infra*. For a description of the progress of negotiations between the consumer electronics and cable industries, see Consumer Electronics Association, Joint Status Report of the Consumer Electronics Association and the National Cable & Telecommunications Association, Oct. 14, 2005, at [http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\\_or\\_pdf=pdf&id\\_document=6518169296](http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6518169296) (visited Oct. 21, 2005). See also Paul Gluckman, *Talks Progress on 2-Way Plug & Play, But Much Remains Undone, Report Says*, COMMUNICATIONS DAILY, Oct. 17, 2005.

<sup>138</sup> CableLabs, *Samsung Electronics Gains CableLabs Certification on 2-Way Digital Television* (press release), Aug. 23, 2005.

<sup>139</sup> Samsung, *Samsung and Time Warner Cable Depoly World's First Interactive OCAP TV* (press release), Jan. 11, 2006.

<sup>140</sup> CEA Comments at 5. With most cable systems, use of the digital cable-ready television set requires that cable subscribers obtain a CableCARD containing security and other circuitry for particular local cable systems. The CableCARD is a removable security module which, when inserted into an OpenCable certified device, enables delivery of digital cable service and other services. CableCARDS are provided directly by the cable operator to customers who request them. CableLabs, at <http://www.cablelabs.com/news/glossary.html#C> (visited Sept 27, 2005). See para. 211 *infra*.

<sup>141</sup> See Ed Bott, *More Two-Way CableCARD Products*, ED BOTT'S MEDIA CENTRAL, Sept. 29, 2005, at <http://www.edbott.com/mediacenter/archives/more-two-way-cablecard-products> (visited Oct. 8, 2005). See also Greg Tar, *Samsung Readies Two-Way Cable Products*, TWICE, Aug. 22, 2005, at <http://www.twice.com/article/CA6250081.html?verticalid=820&industry=Video&industryid=23099&pubdate=08/22/2005> (visited Oct. 8, 2005).

<sup>142</sup> VOD differs from PPV. PPV is a pay television service for which cable subscribers pay a one time fee for each program viewed. The programs are generally available at pre-set times and in some cases are time shifted across several channels to increase the opportunity for viewing. Once initiated, the program cannot be paused, rewound or fast-forwarded.

homes passed by cable systems.<sup>143</sup> At year-end 2004, there were 19.5 million VOD-enabled digital capable households and this is projected to grow to 23.9 million by the end of 2005.<sup>144</sup>

57. Comcast's VOD service, which is available to 87 percent of Comcast subscribers, allows digital cable subscribers to choose from a menu of more than 3,500 programs, at any given time, with most of these programs available free.<sup>145</sup> Comcast says its VOD service is growing rapidly, and it expected subscribers to order 1.5 billion VOD programs in 2005.<sup>146</sup> Comcast's VOD content includes the recently launched PBS Kids Sprout on Demand, independent films, multicultural programs, movies, and newscasts from local broadcast stations.<sup>147</sup> Comcast's "Select on Demand" service provides 15 VOD channels, each a collection of original programming organized by particular themes.<sup>148</sup> By the end of March 2005, Cox's VOD service had been deployed in eight markets and was available to about half of Cox's digital subscribers.<sup>149</sup> Cox's VOD service provides access to 600 hours of content, including 100 hours of free programming.<sup>150</sup> Time Warner's VOD service is available in all of its 31 cable operating divisions.<sup>151</sup> With Time Warner's Premiums on Demand VOD service, digital cable subscribers who also subscribe to a premium channel (*i.e.*, HBO, Showtime, Cinemax, or the Movie Channel) receive unlimited access to movies offered on the premium movie channels for a monthly fee.<sup>152</sup> With Time Warner's Movies on Demand VOD service, digital cable subscribers may access hundreds of movies for a rental fee.<sup>153</sup> Cablevision's VOD service provides over 200 hours of free programming and subscriptions to HBO on Demand, Cinemax on Demand, Anime Network on Demand, Showtime on Demand, Disney Channel on Demand, Playboy TV on Demand, and IFC Uncensored on Demand, which offers independent films and original series.<sup>154</sup> Charter's VOD service offers thousands of movies including those available through premium channels like HBO On Demand and Showtime on Demand.<sup>155</sup>

<sup>143</sup> *Advanced Services Spread Across Cable Systems*, Cable TV Investor, Apr. 26, 2005, at 5.

<sup>144</sup> Cable Databook at 12.

<sup>145</sup> Comcast Comments at 48. For an overview of Comcast's VOD service, see <http://www.comcast.com/Benefits/CableDetails/Slot5PageOne.asp> (visited Sept. 27, 2005). See also Comcast Corp., at <http://www.cmcsk.com/phoenix.zhtml?c=147565&p=irol-digital> (visited Sept. 29, 2005).

<sup>146</sup> Jonathan Make, *Comcast Customers Will Use Its VOD Service 50% More Times by Year-End*, COMMUNICATIONS DAILY, Sept. 20, 2005.

<sup>147</sup> Comcast Comments at 48-49.

<sup>148</sup> For example, Select On Demand's "Wheels and Wings" channel focuses on content for car enthusiasts, while "Anime Selects" offers an array of animation programs. Comcast Comments at 51.

<sup>149</sup> The eight markets are: San Diego, California; Oklahoma City, Oklahoma; Hampton Roads, Virginia; Las Vegas, Nevada; New Orleans, Louisiana; Omaha, Nebraska; New England (markets in Connecticut and Rhode Island); and Orange County, California. Cable TV Investor, July 29, 2005, at 3.

<sup>150</sup> *Id.* For an overview of Cox VOD service, see <http://www.cox.com/DigitalCable/ondemand> (visited Sept. 27, 2005).

<sup>151</sup> Each of Time Warner's cable operating divisions is a cluster of cable franchises.

<sup>152</sup> For an overview of Time Warner's Premiums on Demand VOD service, see <http://www.timewarnercable.com/corporate/products/digitalcable/premiumsondemand.html> (visited Sept. 27, 2005).

<sup>153</sup> For an overview of Time Warner's Movies on Demand VOD service, see <http://www.timewarnercable.com/corporate/products/digitalcable/moviesondemand.html> (visited Sept. 27, 2005).

<sup>154</sup> For an overview of Cablevision's VOD service, see [http://www.io.tv/index.jhtml?pageType=on\\_demand](http://www.io.tv/index.jhtml?pageType=on_demand) (visited Sept. 27, 2005).

<sup>155</sup> For an overview of Charter's VOD service, see <http://www.charter.com/services/ondemand/ondemand.aspx> (visited Sept. 27, 2005).

58. **Digital Video Recorders (DVRs).** DVR service allows subscribers to record programs onto a hard drive located in a set-top box, which can then be played back at any time. DVR features include fast-forward, rewind, and the ability to pause live television. While early units were marketed independently, cable and satellite operators are integrating DVR functionality into their digital set-top boxes.<sup>156</sup> At the end of 2004, DVR service was available to 79 percent of the homes passed by cable systems and there were 1.8 million subscribers equipped with integrated DVRs.<sup>157</sup> Many cable and satellite operators use dual-tuner DVRs which enable subscribers to record one or more programs while watching another program.

59. Comcast's dual-tuner DVR service is available in all Comcast's markets and can be purchased by digital cable subscribers for an additional \$9.95 per month.<sup>158</sup> More than 575,000 households subscribe to Comcast's DVR service.<sup>159</sup> In March 2005, Comcast and TiVo announced a partnership to offer TiVo-based DVR service to Comcast subscribers.<sup>160</sup> DIRECTV, however, recently began to transition from TiVo's DVR hardware toward an in-house DVR product.<sup>161</sup> Cox's DVR service is available in Cox's upgraded service areas and costs \$9.99 per month.<sup>162</sup> In Northern Virginia, Cox is testing and planning to offer multi-room DVR service in 2006 that delivers DVR service to several televisions in a household with a single DVR set-top box.<sup>163</sup> At the end of June 2005, the number of subscribers to Time Warner's DVR service had grown to 1.1 million from 862,000 at the end of 2004, representing 22 percent of the company's digital cable subscribers.<sup>164</sup> Time Warner's DVR service is available to digital cable subscribers for \$9.95 per month. Cablevision's DVR service is also available to digital cable subscribers for \$9.95 per month. Charter dual-tuner DVR service is available in limited Charter service areas for \$9.99 per month.<sup>165</sup>

60. **High-Definition Television (HDTV).** HDTV features dramatically improved, highly detailed picture quality, improved audio quality, and a wide-screen display.<sup>166</sup> For subscribers to receive the high-definition service tier, most cable companies require subscription to the digital service and use of a high-definition set-top box.<sup>167</sup> To obtain the full visual effect of HDTV, a cable subscriber also needs

<sup>156</sup> At the end of June 2005, there were approximately 8.3 million subscribers to DVR services in the U.S. See Nick Wingfield, *TiVo Slashes Recorder Price in Half, \$50*, WALL STREET JOURNAL, Sept. 7, 2005, at D1. TiVo, the leading seller of DVRs, has almost 3.6 million subscribers, although its lead is vanishing as cable and satellite operators are offering their own DVRs to subscribers. *Id.* See also Joe Mandese, *DVR Threat Gets Downgraded*, BROADCASTING & CABLE, Sept. 12, 2005, at 20.

<sup>157</sup> *Advanced Services Spread Across Cable Systems*, Cable TV Investor, Apr. 26, 2005, at 5.

<sup>158</sup> Comcast Corp., at <http://www.cmcsk.com/phoenix.zhtml?c=147565&p=irol-digital> (visited Sept. 29, 2005).

<sup>159</sup> Comcast Comments at 52.

<sup>160</sup> Comcast Corp., *Comcast and TiVo Announce Strategic Partnership* (press release), Mar. 15, 2005.

<sup>161</sup> Jane L. Levere, *In a Challenge to TiVo, DirecTV Promotes Its Own Box*, NEW YORK TIMES, Oct. 7, 2005, at <http://www.nytimes.com/2005/10/07/business/07adco.html> (visited Oct. 27, 2005).

<sup>162</sup> See Cox Communications, at <http://www.cox.com/Fairfax/Digitalcable/dvrfaqs.asp> (visited Oct. 4, 2005).

<sup>163</sup> *Cox Turns Attention to Advanced Video Services*, Cable TV Investor, July 29, 2005, at 3.

<sup>164</sup> Time Warner Inc., *Time Warner Inc. Reports Second Quarter 2005 Results* (press release), Aug. 3, 2005; Time Warner Inc., *Time Warner Reports Results for 2004 Full Year and Fourth Quarter* (press release), Feb. 4, 2005.

<sup>165</sup> See Charter Communications, at <http://www.charter.com/services/dvr/dvr.aspx> (visited Oct. 4, 2005).

<sup>166</sup> HDTV service typically includes a mix of broadcast, basic cable, and premium nonbroadcast networks.

<sup>167</sup> See Comcast, at [http://comcast.p.delivery.net/m/p/com/mic/HD\\_Index.asp](http://comcast.p.delivery.net/m/p/com/mic/HD_Index.asp) (visited Oct. 20, 2005); Cox, at <http://cox.com/Fairfax/digitalcable/hdtrates.asp> (visited Oct. 7, 2005); Time Warner, at <http://timewarnercable.com/corporate/products/digitalcable/hdtv.html> (visited Sept. 30, 2005); Cablevision, at (continued....)



its HD set-top boxes to offer an all-in-one equipment and service package.<sup>319</sup> In February 2006, EchoStar began delivering HD local broadcast stations in the New York and Los Angeles markets.<sup>320</sup> DIRECTV's HD Package includes ESPN HD, ESPN2 HD, Discovery HD Theater, HDNet, HDNet Movies and Universal HD for \$10.99 per month.<sup>321</sup> DIRECTV delivers the national HD broadcast feed of ABC, CBS, Fox, NBC, and WB in select markets.<sup>322</sup> DIRECTV is planning to use its Spaceway - F1 satellite to deliver HD local broadcast stations in select markets.<sup>323</sup> Beginning in October 2005, DIRECTV launched HD local broadcast stations in several markets.<sup>324</sup>

86. EchoStar and DIRECTV also continue to develop their DVR services. Presently, neither EchoStar nor DIRECTV offers real-time on-demand programming because they lack the capacity on their satellites to store programming and provide feeds to individual subscribers. DIRECTV states that it has experienced higher subscription rates for its DVR-enabled equipment and services following more attractive pricing for the service.<sup>325</sup> DIRECTV has been packaging TiVo's DVR platform into some of its receivers, but has announced that it will transition to its own DIRECTV Plus DVR, which is

<sup>319</sup> Craig Moffett, Tom Wolzien, *View from the Back Office*, Bernstein Research, Jan. 7, 2005. DIRECTV sells a 30-inch LCD TV for \$1,600 and 40-inch TV for \$4,000, including delivery, installation, satellite dish, and the DISH 811 HD set-top box.

<sup>320</sup> EchoStar Communications Corp., *Dish Network Launches Local TV Stations in High Definition in Los Angeles via Satellite* (press release), Feb. 2, 2006; EchoStar Communications Corp., *Dish Network Launches Local TV Stations in High Definition in New York City via Satellite* (press release), Feb. 2, 2006.

<sup>321</sup> See The DIRECTV Group, Inc., HD Programming, at [http://www.directv.com/DTVAPP/imagine/HDTV\\_programming.jsp](http://www.directv.com/DTVAPP/imagine/HDTV_programming.jsp).

<sup>322</sup> For example, DIRECTV subscribers have two ways to receive satellite-delivered Fox HD programming. First, customers who have an HD receiver and a Total Choice programming package can receive Fox HD programming from either WNYW (located in New York) or KTTV (located in Los Angeles), depending upon their geographic location. The select markets where eligible customers may receive the feeds are: New York; Los Angeles; Chicago; Philadelphia; Boston; Dallas; Washington D.C.; Minneapolis; Detroit; Atlanta; Houston; Tampa Bay and Orlando; Cleveland; Phoenix; Denver; St. Louis; Milwaukee; Kansas City; Salt Lake City; Birmingham; Memphis; Austin' and Greensboro, North Carolina. The second option, available only to unserved households, is to receive Fox HD programming as part of their Distant Network Service. Subscribers must have an HD capable TV set, a DIRECTV HD receiver, and a satellite dish capable of receiving signals from three separate DIRECTV satellites. See The DIRECTV Group, Inc., Local Channels in HD, at [http://www.directv.com/DTVAPP/imagine/HDTV\\_localchannels.jsp](http://www.directv.com/DTVAPP/imagine/HDTV_localchannels.jsp).

<sup>323</sup> Initially, DIRECTV plans to deliver local HD broadcast channels to the following television markets: New York, Los Angeles, Chicago, Philadelphia, Boston, San Francisco, Dallas, Washington, D.C., Atlanta, Detroit, Houston and Tampa. The DIRECTV Group, Inc., *DIRECTV Announces First 12 Markets to Receive Local Channels in High-Definition This Year* (press release), Jan. 6, 2005. DIRECTV states that it will carry each of the primary broadcast networks that offer an HD feed in the market and its customers who subscribe to a local channel package will receive both the standard-definition and HD signal. According to DIRECTV, HD local programming can be received via a new model of dish and customers will require new HD set-top boxes compatible with the new MPEG-4 compression standard.

<sup>324</sup> DIRECTV is providing high definition local channels in Boston, Massachusetts, Dallas and Houston, Texas, Tampa, Florida, Washington, D.C., Detroit, Michigan, New York, New York, and Los Angeles. See e.g., *DIRECTV Lights Up HD Locals in Detroit*, Satellite Business News FAXUPDATE, Oct. 21, 2005; The DIRECTV Group, *DIRECTV Delivers High-Definition Local Channels to Boston, Dallas, Houston, Tampa, and Washington, D.C.* (press release), Dec. 9, 2005; The DIRECTV Group, *DIRECTV Transmits High-Definition Local Channels in New MPEG-4 Transmission Standard to Los Angeles* (press release), Dec. 28, 2005; The DIRECTV Group, *DIRECTV Brings High-Definition Local Channels to New York Today* (press release), Dec. 28, 2005. DIRECTV is carrying the HD local broadcast feed of the ABC, NBC, CBS, and Fox affiliates.

<sup>325</sup> DIRECTV Comments at 18.



manufactured by News Corp. subsidiary NDS.<sup>326</sup> In addition to providing DVR functionality, the new set-top box is designed to support DIRECTV's new interactive features, VOD functionality, and pay-per-view movies with VOD functionality.<sup>327</sup> DIRECTV charges \$5.99 per month for its DVR service.<sup>328</sup> EchoStar introduced "DISH on demand" which is based on the model 625 set-top box that offers a hard drive that can record up to 100 hours of programming and reserves enough space for EchoStar to download movies and other content via satellite for the subscriber to view "on demand."<sup>329</sup> DIRECTV reported that it had two million subscribers with DVRs as of June 2005.<sup>330</sup> EchoStar has not reported its DVR subscribership since it reported that it reached one million DVR subscribers in September 2003.<sup>331</sup>

### C. Broadband Service Providers

87. For purposes of this report, we define broadband service providers (BSPs) as newer firms that are building state-of-the-art, facilities-based networks to provide video, voice and data services over a single network.<sup>332</sup> Most BSPs are overbuilders.<sup>333</sup> As we have noted previously, BSPs continue to face considerable challenges as discussed below, and competition to cable from BSPs is limited to very few markets. As discussed in the Local Exchange Carrier section, below, a renewed interest from large LECs in entering the video distribution market may change this fact over the next few years.

88. **OVS.** In 1996, Congress established the open video system (OVS) framework, one of four statutorily recognized options for the provision of video programming services by LECs.<sup>334</sup> BSPs

<sup>326</sup> DIRECTV is expected to introduce its new DVR in late 2005. Ian Olgeirson, *DIRECTV Hit By DVR Delays, But Forecast Looks Bright*, The DBS Report (Kagan Research LLC), Aug. 29, 2005; Steve Donohue, *DIRECTV DVR Retail Debut Delayed*, MULTICHANNEL NEWS, Oct. 21, 2005.

<sup>327</sup> DIRECTV Comments at 18. The DIRECTV Plus receiver has a 160-hour recording capacity, but DIRECTV is reported to be making only 100 hours available for consumers to use for their own recording. The remaining 60 hours will be used by DIRECTV to deliver programming, which subscribers can purchase for an additional fee. For example, DIRECTV will deliver select NBC Universal programming from the NBC broadcast network and NBC Universal cable networks, such as USA, Sci Fi and Bravo, to its subscribers' DIRECTV Plus DVRs, which can be accessed on a commercial-free basis for \$0.99 per episode. See Brook Barnes and Peter Grant, *CBS, NBC Deals Accelerate Shift in TV Landscape*, WALL STREET JOURNAL, Nov. 8, 2005; The DIRECTV Group, Inc., *NBC Universal and DIRECTV Announce First Ever On Demand Deal for Primetime Network Programming; Top NBC Universal Content On Demand for \$0.99* (press release), Nov. 7, 2005.

<sup>328</sup> DIRECTV does not charge subscribers for DVR service if they are subscribers to its Total Choice Premier programming package, which costs \$93.99 per month. Existing customers seeking to upgrade their service must purchase a DVR equipped set-top box and agree to a new programming contract.

<sup>329</sup> Craig Moffett, Tom Wolzien, *View from the Back Office*, Bernstein Research, Jan. 7, 2005.

<sup>330</sup> Ian Olgeirson, *DIRECTV Hit By DVR Delays, But Forecast Looks Bright*, The DBS Report (Kagan Research LLC), Aug. 29, 2005, at 1. As of March 31, 2005, DIRECTV was reported to have 1.68 million DVR subscribers. Craig Moffett, Amelia Wong, and Lauren M. Pastrich, *DIRECTV (DTV): A Much Brighter Outlook for SDCF*, Bernstein Research Call, May 3, 2005, at 3.

<sup>331</sup> *2004 Report*, 20 FCC Rcd at 2800 ¶ 68. Kagan forecasts that DIRECTV and EchoStar will reach approximately 5.3 million DVR customers by the end of 2005, or approximately one-fifth of total DBS subscribers. See Kagan Research, LLC, *DIRECTV Hit By DVR Delays, But Forecast Looks Bright*, The DBS Report, Aug. 29, 2005, at 1.

<sup>332</sup> The term BSP is not intended to imply anything with respect to Commission's policy or proceedings that might involve broadband services. Usually, the services of a BSP can be purchased separately as well as in a bundle. See *2001 Report*, 17 FCC Rcd at 1296-97 ¶ 3. See also *2002 Report*, 17 FCC Rcd at 26948-52 ¶¶ 102-11.

<sup>333</sup> *2004 Report*, 20 FCC Rcd at 2801 ¶ 70. An overbuilder is an MVPD that "overbuilds" a second cable network where one already exists.

<sup>334</sup> Most, if not all, OVS providers are also overbuilders. We treat them in a separate section to highlight the separate regulatory classification that Congress created. 47 U.S.C. §571(a)(3)-(4); *1996 Report*, 12 FCC Rcd at (continued....)

BSPs are consolidating ownership of their system holdings, which may help BSPs gain economies of scale and become more financially stable.<sup>345</sup>

91. **Nature of MVPD Competition.** BSPA highlights a 2005 U.S. Government Accountability Office (GAO) study that examined overbuild video systems.<sup>346</sup> The report states that DBS penetration varies depending on the type of community (*i.e.*, urban, rural, or suburban) and the technical sophistication of the cable competitor and/or the presence of an overbuilder. BSPA maintains that DBS is not as direct a substitute for cable as are BSPs, and that the variation of DBS penetration across communities argues that the Commission should not accede to cable industry arguments that cable is no longer dominant in the MVPD market.<sup>347</sup> We note that the 2004 GAO Report studied six market pairs for which one market of each pair was served by a BSP overbuilder, and the other was not. GAO found that communities with overbuild competition experienced lower rates (an average of 23 percent lower for basic cable) and higher-quality service. GAO also found that BSPs were facing difficulties competing, such as access to programming and Multiple Dwelling Units (MDUs), and franchise requirements imposed by localities.<sup>348</sup> BSPA calls upon the Commission to monitor and analyze DBS competition as GAO did in the *GAO 2005 Report*, and to reject the notion that markets are not competitive until such time as competitors achieve a market share of 25-30 percent.<sup>349</sup> Comcast strongly disputes the allegation that DBS competition is not meaningful, referring to the “dramatic effects” that DBS competition has had on the multichannel video marketplace.<sup>350</sup>

#### **D. Broadcast Television Service**

##### **1. General Performance**

92. Broadcast networks and local stations supply video programming directly over the air to consumers. Consumers who do not subscribe to an MVPD service rely solely on over-the-air transmission of local broadcast television signals. Other households receive broadcast television programming over the air on those television receivers that they have chosen not to connect to an MVPD service. In addition, many consumers receive broadcast signals via their cable, DBS, or other MVPD service.

93. As we reported last year, broadcast television stations’ audience shares have continued to fall as cable and DBS penetration, the number of cable channels, and the number of nonbroadcast networks continue to grow. For the 2004-2005 television season, broadcast television stations accounted for a combined average 47 share of prime time viewing among all television households, compared to a 48 share in the previous season.<sup>351</sup> Broadcast stations achieved a 41 share of all-day (24-hour) viewing

<sup>345</sup> BSPA Comments at 6.

<sup>346</sup> GAO, *Direct Broadcast Satellite Subscribership Has Grown Rapidly, but Varies Across Different Types of Markets*, GAO-05-257, Apr. 2005 (*GAO 2005 Report*). The *GAO 2005 Report* studies how DBS penetration varies across different types of markets (rural, suburban, and urban) and against different types of cable systems (not upgraded, partially upgraded, and fully upgraded). The report finds that DBS penetration is highest in rural areas and lowest in urban, and highest in areas served by a cable system that has not been upgraded and lowest in areas served by a cable system that has been fully upgraded.

<sup>347</sup> BSPA Comments at 7-12.

<sup>348</sup> GAO, *Telecommunications: Wire-Based Competition Benefited Consumers in Selected Markets*, GAO-04-241, Feb. 2004.

<sup>349</sup> BSPA Comments at 10.

<sup>350</sup> Comcast Reply Comments at 37-41. See also Time Warner Reply Comments at 1-4.

<sup>351</sup> Nielsen Media Research, *Broadcast Calendar (TV Season) Share of Audience Report, Prime Time and Total Day*, Sept., 2005. Nielsen reports audience shares that exceed 100 percent when totaled due to simultaneous multiple set viewing. We have normalized audience shares to equal 100 percent.

networks. Even with the most advanced compression technology available, broadcast quality video is not possible over a 56 kbps dialup connection.<sup>499</sup> Broadcast quality video is possible, however, at 768 kbps with advanced compression/decompression technology (codecs<sup>500</sup>) and at 1.5 Mbps or higher broadcast quality standard-definition MPEG-2 is possible.<sup>501</sup> Some industry observers continue to believe, however, that widespread adoption of streaming video will only be possible if connection speeds significantly increase over those currently achieved over cable and DSL broadband.<sup>502</sup> As we reported last year, the Internet2 network continues to facilitate high-quality streaming video using its highly reliable 10 Gbps backbone.<sup>503</sup> The Internet2 network, however, continues to primarily serve the research and academic communities.

137. Regardless of the fact that there is relatively minimal availability of high-quality video from such high-speed networks as the Internet2, many households continue to access streaming video using dial-up and residential high-speed Internet access connections. The overall number of homes with access to the Internet continues to grow, as does the number of Americans who access the Internet via a high-speed broadband connection. According to one report, as of June 2005, there were approximately 33.7 million residential high-speed Internet access subscribers, representing approximately 48 percent of the 70.3 million residential Internet subscription households.<sup>504</sup> As of January 2005, an average of 14 percent of all Americans had watched some form of streaming video in the past month, and approximately eight percent of Americans had accessed streaming video content in the past week.<sup>505</sup>

138. Many traditional programmers continue to offer streaming video on their websites to increase access to and supplement their regular television programming content. For example, CBS News, CNN, Comedy Central, and Nickelodeon offer 24-hour web access to some regularly featured television programming; ESPN.com has partnered with Major League Baseball to provide access to baseball games and baseball highlights; College Sports TV provides access to live video feeds of some college football games; MTV offers access to regularly featured programming and supplemental content; and In2TV, a partnership between AOL and Warner Bros., allows consumers to stream full-length episodes of popular television series from a library of thousands of television programs.<sup>506</sup> In addition,

<sup>499</sup> Envivio, Inc., at <http://www.envivio.com/images/products/4CasterB3Datasheet050902.pdf> (visited Nov. 30, 2005).

<sup>500</sup> Codec is short for "compression/decompression." Compression refers to the process by which redundant information is removed from a digital stream to reduce the bandwidth required to transmit it. Decompression is the reverse process of recovering the removed information to restore the original digital stream. Advanced video codecs are capable of removing more redundant information as compared to legacy codecs, with little impact on the video quality. Harry Newton, *NEWTON'S TELECOM DICTIONARY* (CMP Books, 17<sup>th</sup> ed., 2001), at 157.

<sup>501</sup> On2Technologies, Inc., at <http://www.on2.com> (visited Nov. 30, 2005). *See also* Network Domain Comments at 6.

<sup>502</sup> *2004 Report*, 20 FCC Rcd at 2817-8 ¶114.

<sup>503</sup> Led by more than 200 U.S. universities, working with industry and government, Internet2 is being developed and deployed for advanced network applications and technologies for research and higher education. The Internet2 cross-country backbone offers 10 gigabits per second, with the goal of offering 100 megabits per second of connectivity between every connected desktop. Internet2, at <http://www.Internet2.edu> (visited Nov. 30, 2005).

<sup>504</sup> *See* Morgan Stanley, *Cable/Satellite*, July 20, 2005, at 28. *See also* Federal Communications Commission, *High-Speed Services for Internet Access*, July 7, 2005, at Table 3 (reporting that, as of December 31, 2004, cable, DSL, wireline, and wireless technologies provided high-speed Internet access to 35.3 million residential and small business subscribers).

<sup>505</sup> Arbitron, Inc., *Internet and Multimedia 2005: The On-Demand Media Consumer*, Sept. 3, 2005, at 5.

<sup>506</sup> Comcast Comments at 24; CSTV Networks, Inc., *CSTV All Access: Thousands of Live Games Streamed Right to Your Computer*, at [http://allaccess.cstv.com/subscriptions/index\\_xxl.jsp?partnerId=cstv\\_aamg](http://allaccess.cstv.com/subscriptions/index_xxl.jsp?partnerId=cstv_aamg) (visited Dec. 27, (continued....))

some traditional content producers are also offering new and unique content over the Internet via the web. For example, Scripps Networks has announced that it will launch ten web-based video channels by the end of 2006; AOL continues to offer such exclusive and specialized video content as the Live8 concert and music videos; and Yahoo and Google are both exploring original content for distribution via the web.<sup>507</sup> Clear Channel Communications plans to add original streaming video programming to some 200 local radio stations' web sites.<sup>508</sup> Maxim Magazine plans to offer free streaming video programming on-demand to Internet users via MSN's video streaming service.<sup>509</sup> MTV plans to launch a free hybrid linear video and video-on-demand channel called MTV Overdrive.<sup>510</sup> "The Knot TV" is a 24-hour streaming video channel featuring wedding-related shows.<sup>511</sup>

139. **Downloadable Video.** As we reported last year, we expect that a large amount of video available through the web will be downloadable video. Downloadable video is available on the websites of both traditional programmers and independent producers of video content. There are numerous online services that allow users to download content to a computer hard drive for viewing on a personal computer, television, or mobile video device. In October 2005, Disney's ABC and Apple's iTunes entered into a deal to offer current and past season episodes of ABC and Disney Channel television shows for download from Apple's iTunes Music Store for viewing on a PC or iPod video player.<sup>512</sup> More established efforts to provide downloadable video include offerings from Movielink, Starz! Ticket on Real Movies, ClickStar and CinemaNow. For example, Movielink, a joint venture of Metro-Goldwyn-Mayer Studios, Paramount Pictures, Sony Pictures Entertainment, Universal Studios, and Warner Bros. Studios, offers movies, television shows, and other popular videos for download on a rental or purchase basis.<sup>513</sup> Some companies are offering or are planning to offer content distribution via the web for independent content producers. DaveTV, Brightcove, and Wi-FiTV provide an Internet-based distribution interface for content producers of all sizes.<sup>514</sup> Some content producers are offering their services directly to Internet users via websites such as Strandvenice.com, which is an online reality channel that offers a 50-minute series pilot episode for free and charges 99 cents for future 30-minute episodes.<sup>515</sup> Akimbo has partnered with producers and distributors of movies and videos to deliver video programming directly to a subscriber's television using the consumer's existing broadband connection.<sup>516</sup>

(Continued from previous page)

2005); America Online, Inc. and Warner Bros., *AOL and Warner Bros. Announce 'In2TV,' New Broadband Network on AOL.com, Delivering The Largest Offering Of Long-Form Television Programming Online* (press release), Nov. 14, 2005.

<sup>507</sup> Comcast Comments at 24; AP, *Scripps Takes Latest Channel Direct to Web*, NEW YORK TIMES, Mar. 21, 2005; David Kaplan, *Home & Garden Hangs Hat Online*, MEDIAPOST, Jan. 14, 2005; Jefferson Graham, *Search Engine Google Sets Sights on Video*, USA TODAY, Jan. 25, 2005, at B1; Saul Hansell, *Google and Yahoo Are Extending Search Ability to TV Programs*, NEW YORK TIMES, Jan. 25, 2005, at C7.

<sup>508</sup> *Clear Channel Overhauls Its Net Strategy*, REUTERS, Mar. 24, 2005.

<sup>509</sup> Gavin O'Malley, *Ladies-On-Demand: Maxim Goes Video Via Deal With MSN*, MEDIA POST, Mar. 31, 2005.

<sup>510</sup> Steve Donohue, *MTV Goes Into Overdrive*, MULTICHANNEL NEWS, Apr. 6, 2005, at 11.

<sup>511</sup> Bob Tedeschi, *Web Sites' Sideline: TV-Type Shows*, NEW YORK TIMES, March 14, 2005, at C5.

<sup>512</sup> Walt Disney Company, *Disney, ABC & Apple Announce Deal to Sell TV Shows Online Hits to Include "Desperate Housewives," "Lost" and "That's So Raven,"* (press release), Oct. 12, 2005.

<sup>513</sup> See Movielink, LLC, *Downloadable Movies are Here*, at <http://www.movielink.com/store/web/help/eLanding.jsp> (visited Dec. 27, 2005).

<sup>514</sup> Comcast Comments at 27-28.

<sup>515</sup> Saul Hansell, *Smaller Video Producers Seek Audiences on Net*, NEW YORK TIMES, Oct. 6, 2005, at C1.

<sup>516</sup> Comcast Comments at 28; see Akimbo Systems, at <http://www.akimbo.com> (visited Nov. 30, 2005). See also Comcast Reply Comments at 8-9.



Akimbo provides the subscriber a set-top box that generates an on-screen guide that enables the subscriber to choose programming from a library of video selections. Akimbo then uses IP technology to deliver the video from a central office, over the Internet, to the subscriber's television.<sup>517</sup>

## 2. Home Video Sales and Rentals

140. The sale and rental of home video, including videocassettes and DVDs, are considered part of the video marketplace because they provide services similar to the premium and pay-per-view offerings of MVPDs.<sup>518</sup> As such, they offer some level of competition to broadcast television, cable television and DBS for the consumer's time and money. Video-on-demand services provided by cable, DBS, and Internet providers have emerged as competitive alternatives to home video.<sup>519</sup>

141. Nine out of ten TV households have at least one VCR.<sup>520</sup> DVDs also have made a significant impact on the home video market. An estimated 80 million households have DVD capability, representing nearly three-quarters of all U.S. households. Consumers purchased 37 million DVD players in 2004, an eight percent increase over 2003, and in the first six months of 2005 nearly 14 million DVD players were sold. Household penetration is expected to reach 80 percent by year-end 2005.<sup>521</sup> There are approximately 47,000 DVD titles available for purchase or rental today compared to 30,000 a year ago.<sup>522</sup> Consumers spent \$24.5 billion renting or purchasing DVDs or VHS videocassettes last year, compared to \$9.4 billion in U.S. movie ticket revenues.<sup>523</sup> Overall, consumers spent \$15.5 billion on DVD sales alone in 2004, a 33 percent increase over 2003, while DVD rentals increased 26 percent over 2003, as consumers spent more than \$5.7 billion.<sup>524</sup>

142. Sales and rentals of DVDs have accounted for 60 percent of entertainment companies' profits over the past eight years.<sup>525</sup> Consumers can purchase DVDs and videocassettes from video chains, such as Blockbuster or Hollywood Video; from mass merchandise stores, such as Target and Wal-Mart; or from online companies, such as Amazon. Consumers rented more than one billion DVDs during the first half of 2005,<sup>526</sup> either at retail outlets or via online services, such as Netflix.<sup>527</sup> Netflix currently has about 3.2 million subscribers. It is projected that Netflix will have four million subscribers by the end of 2005, and five million by the end of 2006.<sup>528</sup> Earlier this year, Wal-Mart and Netflix entered a partnership whereby Netflix will promote Wal-Mart DVD sales and Wal-Mart will offer its online customers the opportunity to sign up with Netflix at Wal-Mart's current online movie rental service price for the year.<sup>529</sup> Netflix also has announced that it plans to offer downloadable movies by the end of

<sup>517</sup> Comcast Comments at 28.

<sup>518</sup> See 2003 Report, 19 FCC Rcd at 1675 ¶ 108.

<sup>519</sup> See, e.g., paras. 56-7 *supra*.

<sup>520</sup> Nielsen Media Research, *Television Audience 2004*, Feb. 2005, at 4.

<sup>521</sup> *Id.* See also NCTA Comments at 15-16.

<sup>522</sup> NCTA Comments at 15.

<sup>523</sup> *Id.*

<sup>524</sup> *Id.* at 16.

<sup>525</sup> Comcast Comments at 35.

<sup>526</sup> *Id.* at 37.

<sup>527</sup> See 2004 Report, 20 FCC Rcd at 2822 n.560.

<sup>528</sup> Comcast Comments at 36.

<sup>529</sup> *Id.*

2005.<sup>530</sup> In addition to its video stores, Blockbuster offers an online DVD rental service and is reported to have a million subscribers, a number that is expected to double by the first quarter of 2006.<sup>531</sup>

### III. MARKET STRUCTURE AND CONDITIONS AFFECTING COMPETITION

#### A. Market Structure and Ownership Issues

143. The video programming market is comprised of a retail market for the distribution of multichannel video programming to households, and a program supply market for the purchase of video programming by MVPDs. In this section, we first review changes in the market for the distribution of video programming, including changes in the level of competition in that market between June 2004 and June 2005. We then review the market for the purchase of video programming by MVPDs, examining the effects that changes in concentration among MVPDs at the national and regional levels have had on this market in the last year.

##### 1. Competitive Issues in the Retail Market for the Distribution of Video Programming to Consumers

144. In the past year, incumbent cable operators' share of all MVPD subscribers continued to decline. As of June 30, 2005, cable operators served 69.4 percent of the 94.2 million MVPD subscribers, compared to 71.6 percent of the 92.3 million MVPD subscribers a year earlier.<sup>532</sup> DBS, the major wireless MVPD technology that is available to subscribers nationwide, saw its share of MVPD subscribers increase between June 2004 and June 2005, from 25.1 percent of the market to 27.7 percent. Relatively few consumers, however, have a second wireline alternative, such as an overbuild cable system, as indicated by the small number of subscribers to BSPs and the limited entry by LEC thus far.<sup>533</sup> Several other MVPD technologies, such as private cable systems and wireless cable systems, offer consumers alternatives to incumbent cable services, but only in limited areas, and their overall share of the MVPD market has declined from 3.29 percent to 2.88 percent over the last year.

145. The Commission recently opened a proceeding to investigate whether the current local franchising process inhibits competitive entry in the retail market for the distribution of video programming.<sup>534</sup> The *Franchising NPRM* seeks comment on issues relating to the implementation of Section 621(a)(1) of the Communications Act. Specifically, the Commission asks how it can ensure that local franchising authorities (LFAs) do not unreasonably refuse to award cable franchises to competitive entrants. The *Franchising NPRM* tentatively concludes that the mandate of Section 621(a)(1) should be interpreted to prohibit not just the ultimate refusal to award a franchise, but also a broader range of behaviors, including the establishment of procedures and other requirements that unreasonably interfere with the ability of would-be new entrants to introduce their competitive offerings quickly.

146. In the *Notice*, we asked about the impact of the local franchising process on new entrants into local markets.<sup>535</sup> In their comments in response to the *Notice of Inquiry* in this docket, a number of

<sup>530</sup> *Id.* at 29.

<sup>531</sup> *Id.*

<sup>532</sup> See Appendix B, Table B-1. The number of MVPD subscribers is the total number of subscribers to all MVPDs listed in the table. The share of MVPD subscribers served by cable systems is the result of adding together the number of subscribers to all MVPD services and calculating the percentage of this total represented by cable subscribers.

<sup>533</sup> See paras. 87-8, 121-5 *supra*. See also Appendix B, Table B-1.

<sup>534</sup> See *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992*, Notice of Proposed Rulemaking, 20 FCC Rcd 18581 (2005) (*Franchising NPRM*).

<sup>535</sup> See *Notice*, 20 FCC Rcd at 14121 ¶ 10.



194. On July 21, 2005, the Commission released a *Notice of Proposed Rulemaking* seeking comment about: (1) the current status of the Commission's closed captioning rules in ensuring that video programming is accessible to deaf and hard of hearing Americans and whether any revisions should be made to enhance the effectiveness of those rules; and (2) several compliance and quality issues relating to closed captioning that were raised in a *Petition for Rulemaking* filed by Telecommunications for the Deaf, Inc., the National Association of the Deaf, Self Help for Hard of Hearing People, Inc., the Association for Late Deafened Adults, and the Deaf and Hard of Hearing Consumer Advocacy Network.<sup>687</sup> This proceeding is pending.

#### d. Packaging of Programming Services

195. In the *Notice*, we sought information on how video programming distributors package and market their programming. We also sought comment concerning the extent that MVPDs offer or plan to offer consumers more choice in channel selection rather than traditional tiering of programming services.<sup>688</sup> The commenters indicate that MVPDs generally continue to offer packages or tiers of service that include a large number of programming networks, including a variety of family-friendly services. Generally, however, parents cannot subscribe to those channels alone.<sup>689</sup> Instead, they must buy the channels they do not want their families to view in order to receive the family-friendly channels they desire. Commenters note that by offering programming on a theme tier or smaller package basis, MVPDs can address consumers' concerns regarding their inability to prevent objectionable content from coming into their homes, can differentiate their service offerings, and can allow subscribers to pay only for those programming services they regularly watch.<sup>690</sup>

196. Recently, a number of cable operators have announced plans to offer family-friendly programming tiers.<sup>691</sup> For example, on December 15, 2005, Time Warner announced that it would launch a family tier in the first quarter of 2006.<sup>692</sup> Consisting of 15 channels, the tier will be priced at an additional \$12.99 a month above the monthly cost of the basic service tier, which averages about \$12 across Time Warner's systems, and generally will require a digital set-top box for every television in the home that will receive the family tier.<sup>693</sup> On December 22, 2005, Comcast announced that it will launch a family tier with an average of 35-40 channels beginning in early 2006.<sup>694</sup> In addition to the 20-25

<sup>687</sup> See also 2004 Report, 20 FCC Rcd at 2848 at ¶ 178. See *Closed Captioning of Video Programming, Telecommunications for the Deaf, Inc., Petition for Rulemaking*, 20 FCC Rcd 13211 (2005).

<sup>688</sup> *Notice*, 20 FCC Rcd at 14122 ¶ 16.

<sup>689</sup> The one exception is Sky Angel's DBS service, which offers a family-friendly, faith-based programming service. See para. 73 *supra*.

<sup>690</sup> ACA Comments at 12; BSPA Comments at 15; see, e.g., Consumers Union and Consumer Federation of America Comments and Reply Comments, MB Docket No. 04-207, July 15, 2004. See Oral Statement of Kevin J. Martin, Chairman, FCC, Before the Committee on Commerce, Science and Transportation, U.S. Senate, *Open Forum on Decency*, Nov. 29, 2005; *Chairman Kevin J. Martin's Statement on the Announcement that Cable Companies May Voluntarily Offer Family Tier* (FCC News Release) Dec. 12, 2005.

<sup>691</sup> According to NCTA, six of the largest MSOs plan to introduce family tiers, although they may have different approaches to launching these tiers, which are in various stages of development. These cable operators are Time Warner, Comcast, Advance/Newhouse Communications (Bright House Networks), Insight Communications, Bresnan Communications, and Midcontinent Communications. See Glen Dickson, *Family Tiering Gets Technical*, BROADCASTING & CABLE, Dec. 19, 2005, at 24.

<sup>692</sup> See Time Warner, *Time Warner Cable Launches Family Choice Tier* (press release), Dec. 15, 2005.

<sup>693</sup> The 15 channels are: Broomerang, C-SPAN 2, C-SPAN 3, CNN Headline News, The Science Channel, Discovery Kids, Disney Channel, DIY Network, FIT-TV, Food Network, HGTV, La Familia, Nick Games & Sports, The Weather Channel, and Toon Disney. *Id.*

<sup>694</sup> See Comcast Corp., *Comcast Announces Family Tier* (press release), Dec. 22, 2005.

channels that customers receive on their basic service tier, Comcast's family tier will include 16 family-friendly networks of primarily G-rated content.<sup>695</sup> According to Comcast, the Family Tier package will cost an average of \$31.20 per month, which will reflect its national average for basic service of \$12, the 16-channel Family Tier for \$14.95, and a digital cable set-top box at a national average price of \$4.25 per month. In January 10, 2006, Cox announced it would launch a Family Tier in early 2006, which will consist of an average of 40 channels of programming, including local broadcast stations and broad-based general entertainment, news, and sports programming.<sup>696</sup> Cox's Family Tier will be offered at a national average price of \$32 per month for the programming package, set-top box with electronic/interactive program guild capability and parental controls for specific programs and channels. On January 17, 2006, Insight announced that it would offer a Family Tier as a digital package that will include 15 channels of programming for \$13 per month. This new tier will be available as an add-on to the 21-channel basic service tier.<sup>697</sup> Other cable operators, such as Midcontinent and Charter, have stated they are committed to developing family-friendly offerings, but have not yet announced specific plans.<sup>698</sup> In addition, DIRECTV plans to offer a Family Tier with more than 40 channels that will include local broadcast stations and nonbroadcast networks at a price of \$34.99 per month.<sup>699</sup> On February 1, 2006, EchoStar began offering a family tier with approximately 40 channels at a price of \$19.99 per month for nonbroadcast channels, and \$24.99 per month with local channels.<sup>700</sup>

<sup>695</sup> The 16 networks include: Disney Channel, Toon Disney, PBS KIDS Sprout, Discovery Kids, Science Channel (Discovery), Nickelodeon/Nick Too, Nickelodeon GAS (Games and Sports), TBN (Trinity Broadcasting), HGTV, Food Network, DIY, CNN Headline News, The Weather Channel, National Geographic, C-SPAN, and C-SPAN 2. *Id.*

<sup>696</sup> Cox Communications, Inc., *Cox communications Announces Family Friendly Package* (press release), Jan. 10, 2006. The 40 channels include: local affiliates of ABC, CBS, NBC, PBS, Fox, WB, UPN, and Univision, and C-SPAN, WGN, home shopping channels, TV Guide Channel, local public, education, and government access channels, and the Disney Channel, Discovery Kids, Headline News, National Geographic Channel, Home & Garden TV, DIY (Do It Yourself), Nickelodeon, Fit TV, Sprout, Discovery Science, Boomerang, and GSN. Local systems will be able to tailor the package with The Weather Channel or Weatherscan Local, C-SPAN 2 or 3, and additional religious and Spanish-language programming.

<sup>697</sup> Insight Communications Company, *Insight Communication Announces Plans for Family-Friendly Tier of Programming* (press release), Jan. 17, 2006. The new tier of programming will include: Home & Garden Television, Food Network, DIY Network, C-SPAN 2, CNBS, CNN Headline News, The History Channel, The Weather Channel, Discovery Kids, Discovery Science, Nick Games & Sports, The Disney Channel, Toon Disney, PBS KIDS Sprout, and Trinity Broadcasting Network (TBN).

<sup>698</sup> See Midcontinent, *Midcontinent Communications to Develop Family Friendly Choice* (press release), Dec. 12, 2005; Jean Spenner, *Cable TV Planning "Family Friendly" Tier*, THE SAGINAW NEWS, Dec. 16, 2005, at <http://www.mlive.com/business/sinews/index.ssf?/base/business-1/1134746428242260.xr..> (visited Dec. 29, 2005).

<sup>699</sup> DIRECTV, Inc., *DIRECTV to Offer Family Programming Package* (press release), Jan. 18, 2006. DIRECTV's package of programming will include: Bloomberg, Boomerang, BYU TV, CNN Headline News, C-SPAN 1, C-SPAN-2, Daystar, Discovery Kids, Disney East, Disney West, DIY Network, EWTN, Food Network, Hallmark Channel, HGTV, HITN, HSN, Link TV, NASA TV, National Geographic Channel, Nickelodeon/Nick at Night East, Nickelodeon/Nick at Night West, Nicktoons, Noggin/The N, NRB Network, Once TV, PBS Kids Sprout, QVC, RFD TV, Shop at Home, Shop NBC, TCT Network, The Science Channel, The Weather Channel, Toon Disney, Trinity Broadcasting Network, Word Network, World Harvest Network, XM Disney Radio, and XM Kids.

<sup>700</sup> EchoStar Communications Corporation, *DISH Network Introduces "DishFAMILY" Programming Tier* (press release), Jan. 19, 2006. EchoStar's programming package includes: Animal Planet, The Biography Channel, Bloomberg TV, Boomerang, BYUTV, C-SPAN, C-SPAN 2, CSTV, Discovery Kids, Discovery Times, Do It Yourself Network, EWTN, Food Network, Fox News Channel, Great American Country, CNN Headline News, HSN, NASA, Nickelodeon East, Nickelodeon West, Nick Games & Sports, Nick Toons, Outdoor Channel, RFD TV, Shop at Home, ShopNBC, The Science Channel, The Weather Channel, TBN, TV Land, and QVC.

197. Alternatively, a number of groups have raised issue with the voluntary industry proposals to offer family tiers. For example, the Parents Television Council contends that “family tiers are not the same as providing consumers with cable choice, the ability to take and pay for only what they want.”<sup>701</sup> In a joint letter to Congress, Consumers Union, the Consumer Federation of America, and Free Press state that the recently announced family tiers are a good first step and demonstrate that cable operators can offer smaller, specialized bundles of service.<sup>702</sup> It, however, is concerned that cable operators, along with broadcasters, have decided which channels will be included and the tiers offer consumers very little choice. In addition, The Concerned Women for America (CWA) assert that parents, rather than the cable industry, should be the ones to decide what is appropriate for their children to watch and that control is taken out of parents’ hands when the cable operators determine which channel to include in their family tiers.<sup>703</sup> Because the announcement and availability of family tiers is a recent development, we are unable to evaluate the effectiveness of these programming packages in this Report.

198. In response to the request for comment on the packaging of programming in the *Notice*, ACA states that many small- and medium-sized cable operators would like to offer themed tiers at a lower cost, and a more family-friendly expanded basic tier, but that major programming providers prevent it by imposing various types of distribution restrictions and requirements. ACA reports that if its members were permitted to move sports services to a separate tier, they would do so because their subscribers would prefer a lower cost expanded basic package and less sports programming. ACA also states that some of its members would like to be able to respond to customers who find the content on certain entertainment networks that carry mature programming to be objectionable and would like to move these networks to a “Contemporary Adult” tier. It adds that these networks carry partial nudity, sexually explicit content, and profanity. According to ACA, this would reduce wholesale costs for the expanded basic tier, ease retail rate pressure, and address subscribers’ concerns.<sup>704</sup>

199. BSPA recognizes that the issue of tiering flexibility, and a la carte service raise many questions which need to be addressed in the marketplace, rather than on paper at the Commission before any decision can be made regarding the final costs and benefits of such offerings (whether to consumers, programmers, or distributors). Accordingly, BSPA proposes that several of its members, with those program suppliers and other cable providers who agree to participate, initiate focused, multi-year market tests in selected local markets, involving a la carte-type offerings. BSPA asserts that its proposed market tests would shed light on a number of questions, including (1) how many subscribers would choose the current structure over a voluntary a la carte option; (2) what level of a la carte would balance the needs of consumers, distributors, and content producers; (3) how many new customers would subscribe to MVPD service if they had a greater choice of offerings; (4) how advertising rates and structures are affected; (5) which networks or types of content would fail to garner significant numbers of subscribers; and (6) the potential financial impact on content producers and distributors. BSPA adds that a market test would improve the Commission’s understanding of the key issues and would better inform the legislative debate in Congress regarding consumer choice, pricing, and indecency issues. BSPA asks the Commission to endorse and support the industry’s pursuit of limited market tests of a la carte offerings.<sup>705</sup>

<sup>701</sup> See Parents Television Council, *PTC Calls “Family Tiers” a “Red Herring”* (press release), Dec. 12, 2005.

<sup>702</sup> See Letter from Jeannine Kenney, Consumers Union, Mark Cooper, Consumer Federation of America, and Ben Scott, Free Press, to Senators Ted Stevens and Daniel Inouye, Co-Chairmen, Committee on Commerce, Science and Transportation, U.S. Senate (Jan. 18, 2006).

<sup>703</sup> See Concerned Women for America, *CWA: Family-Friendly Tiers are Not the Answer* (press release), Dec. 12, 2005.

<sup>704</sup> ACA Comments at 12-13.

<sup>705</sup> BSPA Comments at 26-27.

200. OPASTCO states that practices that require rural carriers to carry channels that most of their customers do not demand, or that compel them to place less popular channels in certain tiers, prevent these carriers from creating tiers that match the demands of their individual markets.<sup>706</sup> Cincinnati Bell states that although it would like to offer differentiated programming packages, pricing options, and bundled services that compete with packages offered by incumbent cable or satellite providers, it will not be able to do so unless it can obtain reasonably priced programming, as well as carriage and tiering flexibility.<sup>707</sup>

201. Consumers for Cable Choice complain that cable's spectrum limitations keep valuable programming from special interest and minority markets. It claims that only those willing to pay a substantial premium can access additional channels and services of interest, if they are available at all. It adds that broadband-based networks offer the promise of substantially more programming options for these important markets. Consumers for Cable Choice point to the Latino market as an example, stating that many cable providers make available only one or two Spanish-speaking networks, and often no English-speaking Latino networks. It claims that IPTV technology could expand the amount of programming available to minority groups and special interests.<sup>708</sup>

202. Disney claims that MVPD subscribers enjoy many program packaging options that typically include retransmission of local broadcast signals, PEG channels, and selected other programming services.<sup>709</sup> DIRECTV provides examples of its programming packages, which include various packages targeted to specific audiences. Its Total Choice package includes sports, movies, family entertainment, music and local channels. It also offers premium channel packages, such as HBO, Starz, Showtime, and Cinemax, as well as several sports and international packages.<sup>710</sup> Dominion Video Satellite, Inc., through its Sky Angel DBS service, provides faith-based programming, as well as news and family-oriented entertainment networks. It states that it serves the needs of an audience that desires a multichannel service that offers a wide variety of both faith-based and family-friendly channels without being required to receive and subsidize programming that is overtly in conflict with their values.<sup>711</sup>

## C. Other Competitive Issues

### 1. Competitive Developments in Small and Rural Markets

203. In the *Notice*, we requested information and comment regarding issues specific to video programming distribution in rural and smaller markets.<sup>712</sup> Small cable operators and telephone companies

<sup>706</sup> OPASTCO Reply Comments at 6.

<sup>707</sup> Cincinnati Bell Comments at 10.

<sup>708</sup> Consumers for Cable Choice Comments at 3-4.

<sup>709</sup> Disney Comments at 4-6. Disney attached its comments in response to the Commission's *Public Notice* in the *A La Carte* proceeding, MB Docket No. 04-207, filed July 15, 2004, to its comments in this proceeding. In those comments, Disney stated that any form of a la carte or tiering would result in consumers paying more for less.

<sup>710</sup> DIRECTV Comments at Exhibits B, C, and D.

<sup>711</sup> E-mail from Nancy Christopher, Vice President, Public Relations, Dominion Sky Angel DBS Television and Radio System, Nov. 15, 2005.

<sup>712</sup> *Notice*, 20 FCC Rcd at 14125-6 ¶ 23. Pursuant to Section 208 of SHVERA, the Commission conducted an inquiry and submitted a Report to Congress on the impact on competition in the MVPD market of the retransmission consent, network nonduplication, syndicated exclusivity, and sports blackout rules, including the impact of those rules on the ability of rural cable operators to compete with the direct broadcast satellite industry in the provision of digital broadcast television signals to consumers. See *Retransmission Consent and Exclusivity Rules: Report to Congress Pursuant to Section 208 of the Satellite Home Viewer Extension and Reauthorization Act of 2004*, Sept. 8, 2005.



under consideration that could include AVC and VC-1 for limited use in terrestrial digital broadcasting.<sup>804</sup> In January 2005, DIRECTV announced that it has begun to transition its operation to AVC, with the intent to provide local HD channels nationwide by 2007.<sup>805</sup>

230. **Mobile Video.** Several technologies have emerged to offer broadcast television to mobile telephones. Digital Video Broadcast-Handheld (DVB-H) and QUALCOMM's proprietary MediaFLO technology are the two most prominent mobile video platforms. Tower operator Crown Castle has deployed a single-frequency DVB-H test site in Pittsburgh, Pennsylvania, using spectrum in the 1440-1790 MHz band.<sup>806</sup> The service will provide video at 24-30 frames per second. Crown Castle plans to launch commercially in select major markets, including New York, in 2006 and to deploy nationwide to the top 30 markets throughout 2007.<sup>807</sup> Verizon Wireless plans to use Crown Castle's network to send live television to its phones in the first quarter of 2006.<sup>808</sup> MediaFLO transmissions are expected to use 700 MHz TV channels.<sup>809</sup> On September 27, 2005, QUALCOMM announced the first live, over-the-air demonstration of the FLO (Forward Link Only) Technology delivered to a wireless handset.<sup>810</sup>

231. Mobile phone companies also are beginning to deliver video programming to cellular telephones and other portable devices via 3G data services. Verizon Wireless launched a 3G multimedia service called VCAST in February 2005. Transmitting at a maximum speed of 300 to 500 kbps, VCAST offers on-demand content, as well as 3D games to phones compatible with the next-generation network.<sup>811</sup> Sprint began streaming live Fox News on wireless phones in April 2005 through its Sprint TV service.<sup>812</sup> Satellite radio providers are also testing mobile video. In January 2005, On2 Networks announced that XM Satellite Radio will use On2 Networks' VP6.2 codec for streaming video to mobile receivers in vehicles.<sup>813</sup>

<sup>804</sup> Currently, the ATSC Technology and Standards Group is considering the possibility of specifying one or two advanced video codecs for the E-VSB mode. CS/TSG-658 and CS/TSG-659, developed by the Specialist Group on Video and Audio Coding (TSG/S6), define the video system characteristics for VC-1 and AVC, respectively.

<sup>805</sup> Robert Heron, *DirecTV's HD Future is MPEG-4*, PC MAGAZINE, Jan. 6, 2005, at <http://www.pcmag.com/article2/0,1759,1748991,00.asp> (visited Oct. 20, 2005).

<sup>806</sup> Junko Yoshida, *Cell Phone Video Gets Real*, EE TIMES, Sept. 20, 2004.

<sup>807</sup> Texas Instruments, *Texas Instruments Brings Live Digital TV to Your Cell Phone* (press release), Oct. 21, 2004. See also Crown Castle, *Crown Castle Mobile Media Becomes Modeo: Showcases Live Mobile TV at International Consumer Electronics Show* (press release), Jan. 4, 2006.

<sup>808</sup> *Verizon Wireless Seen Offering TV via Crown Castle*, EWEEK.COM, Oct. 4, 2005, at <http://www.eweek.com> (visited Oct. 20, 2005).

<sup>809</sup> Doug Lung, *Broadcasting to Cell Phones*, TV TECHNOLOGY, Sept. 7, 2005, at <http://www.tvtechnology.com> (visited Sept. 7, 2005).

<sup>810</sup> QUALCOMM, *QUALCOMM Conducts First Live Demonstration of FLO Technology on a Wireless Handset* (press release), Sept. 27, 2005.

<sup>811</sup> Ed Oswald, *Verizon Wireless VCast Goes Live*, BETANEWS.COM, Feb. 1, 2005, at [http://www.betanews.com/article/Verizon\\_Wireless\\_VCAST\\_Goes\\_Live/1107259065](http://www.betanews.com/article/Verizon_Wireless_VCAST_Goes_Live/1107259065) (visited Dec. 12, 2005). See also NCTA Comments at 10-11.

<sup>812</sup> David Hayes, *Sprint Presents Live TV on Phone*, KANSAS CITY STAR, Apr. 19, 2005, at <http://www.kansascity.com/mld/kansascity/business/technology/11428413.htm> (visited Oct. 20, 2005). Viewers see the broadcast at just under 15 frames per second, the minimum required for humans to perceive continuous motion. See also NCTA Comments at 11.

<sup>813</sup> On2 Technologies, Inc., *XM Satellite Radio Selects On2 True Motion VP6* (press release), Jan. 5, 2005.

232. MobiTV launched live broadcast television service beginning in November 2003, although the initial service deployment frame rate was only one frame per second.<sup>814</sup> The first MobiTV service allowed consumers to access some 13 channels in real time.<sup>815</sup> MobiTV today is providing about 36 channels to 500,000 subscribers.<sup>816</sup> The service is available to customers of Sprint PCS, Cingular, and several regional carriers.<sup>817</sup> Other startups, such as GoTV, PacketVideo, and SmartVideo, are delivering video content to phones. Chip manufacturers continue to improve the speed and quality of mobile video.

233. Consumer electronics manufacturers are beginning to offer portable video players. Computer manufacturer Apple recently unveiled a new version of the iPod capable of carrying 75-150 hours of downloaded video.<sup>818</sup> Disney offers programming through the iTunes store that consumers can view on the iPod, including Pixar short films and hit television shows for \$1.99 per download.<sup>819</sup> In March 2005, Sony released the Playstation Portable, a combination portable gaming device and media player that can display full-length movies from a Sony proprietary Universal Media Disc (UMD).<sup>820</sup> CinemaNow offers movie downloads that consumers can view on PCs and on several portable video players from a variety of manufacturers.<sup>821</sup> The Commission will monitor these nascent technologies as their services develop.

234. **DOCSIS 3.0.** CableLab's Data Over Cable Service Interface Specification or DOCSIS continues to be the dominant standard used to provide high-speed Internet service for cable operators. As the throughput to operators increases, their ability to deliver additional and more complex services, including video over IP, increases.<sup>822</sup> As noted in our *2004 Report*,<sup>823</sup> CableLabs will not pursue a new DOCSIS 2.x specification<sup>824</sup> and will instead use routine "Engineering Change Requests"<sup>825</sup> to add many

<sup>814</sup> Jefferson Graham, *With MobiTV, It's Television on the Go*, USA TODAY, Oct. 9, 2005 (*Graham Article*), at <http://www.indystar.com/apps/pbcs.dll/article?AID=/20051009/BUSINESS/510090347/1003/BUSINESS> (visited Dec 12, 2005).

<sup>815</sup> MobiTV, *Watch Live TV Content On Your Sprint Mobile Phone* (press release), Nov. 13, 2003.

<sup>816</sup> Jefferson Graham, *TV on Cellphones? Funny but Profitable*, USA TODAY, Sept. 27, 2005, at [http://www.usatoday.com/tech/products/services/2005-09-27-mobitv\\_x.htm](http://www.usatoday.com/tech/products/services/2005-09-27-mobitv_x.htm) (visited Dec 12, 2005). *See also* MobiTV, *MobiTV Channel Lineup*, at <http://www.mobitv.com/channels/index.html> (visited Oct. 20, 2005).

<sup>817</sup> *Graham Article*. *See also* NCTA Comments at 11.

<sup>818</sup> Apple, *Apple Unveils the iPod; Fifth Generation iPod Now Play Music, Photos & Video* (press release), Oct. 12, 2005.

<sup>819</sup> *Apple's Wide-Ranging Video Visions*, IPMediaMonitor, Oct. 17, 2005, at [http://www.ipmediamonitor.com/subscribers/index.htm?article\\_id=46&sid=1](http://www.ipmediamonitor.com/subscribers/index.htm?article_id=46&sid=1) (visited Oct. 20, 2005).

<sup>820</sup> Sony, *Most Anticipated Consumer Product Launch of 2005, PSP [Playstation Portable] Ushers in a New Era In Portable Entertainment* (press release), Mar. 24, 2005.

<sup>821</sup> MediaNow, *CinemaNow is First to Add Download-To-Own Video Option to Online Service* (press release), Jan. 15, 2004.

<sup>822</sup> "Throughput" is the actual amount of useful and non-redundant information which is transmitted or processed. *See* Harry Newton, *NEWTON'S TELECOM DICTIONARY* (CMP Books, 17<sup>th</sup> ed., 2001), at 697.

<sup>823</sup> *2004 Report*, 20 FCC Rcd 2859 ¶ 209.

<sup>824</sup> Alan Breznick, *CableLabs Drops DOCSIS 2.x Plans, Eyes DOCSIS 3.0 Spec*, CABLE DATACOM NEWS, Sept. 2004.

<sup>825</sup> An Engineering Change Request (ECR) is the first step in the procedure to change CableLabs specifications. CableLabs posts the proposed change to their website and sends the ECR to a subject area working group mail list for work on the proposed change. CableLabs then posts an Engineering Change Order (ECO) to their website with indication of an ECO Comment Deadline. The final step in the procedure to change specifications is called an Engineering Change Notice (ECN), in which the proposed change is officially considered to be part of the (continued....)



**EXHIBITS B THROUGH G OF THE  
DECLARATION OF ELEANOR M. LACKMAN  
HAVE BEEN FILED UNDER SEAL PURSUANT OF THE  
ORDER OF THE HONORABLE SHIRA A. SCHEIDLIN  
ENTERED ON AUGUST 24, 2006.**

**CERTIFICATE OF SERVICE**

I, Anthony D. Boccanfuso, an attorney duly admitted to practice before this Court, respectfully show that on the 5<sup>th</sup> day of September, 2006, I caused the annexed **PUBLIC RECORD VERSION OF DECLARATION OF ELEANOR M. LACKMAN** to be served by Federal Express delivery upon:

John C. Englander  
Goodwin Procter LLP  
53 State Street  
Exchange Place  
Boston, MA 02109

Benjamin Hershkowitz  
Goodwin Procter LLP  
599 Lexington Avenue  
New York, NY 10022

  
Anthony D. Boccanfuso

